CLAIMS

- 1. Method for reserving, on at least one node of an Ethernet bus type communication network, a predetermined fraction of the bandwidth of the digital bus during a cycle; characterized in that it consists in:
 - having a token circulate between the nodes of the network (A, B, C, D) so as to enable the nodes of the network to send in turn a data packet over the bus (1) according to a predefined sequence defining a chronological order of passage of the token between all the nodes during a cycle; and
 - in which the predetermined fraction of the bandwidth reserved for a node of the network corresponds in the sequence to a certain number of occurrences of passage of the token via the node concerned.
- 15 2. Method according to Claim 1, in which the occurrences of passage of the token via a node of the network are distributed in the sequence among the occurrences of passage of the token via the other nodes of the network.
- 20 3. Method according to Claim 1 or 2, in which the chronological order of passage of the token between the nodes of the network is defined by a master node of the network.
- 4. Method according to Claim 3, in which the master node, on initialization of the network, constructs a first table (2) storing, for each node of the network, information indicative of the fraction of bandwidth reserved for the node of the network and, on the basis of the first table, the master node constructs a second table (2) storing the sequence defining the order of passage of the token between the nodes of the network.
 - 5. Ethernet bus type domestic communication network comprising network nodes configured to apply a method according to one of Claims 1 to 4.
- 6. Communication device designed to be connected to a digital bus communication network, characterized in that it is configured to have a token circulate between the nodes of the network during a cycle and in that it is organized to construct a first table storing, for each node of the network, information indicative of a fraction of the bus bandwidth

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reserved for the node of the network and a second table storing a sequence defining a chronological order of passage of the token between all the nodes during a cycle, the fraction of the bandwidth reserved for a node of the network corresponding in the sequence to a certain number of occurrences of passage of the token by the node concerned.

REPLACED BY ART 34 AMOT

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